

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of manufacturing a microelectronic package, comprising:
~~providing a package substrate;~~
coupling a device substrate to ~~the~~ a package substrate;
assembling a bifurcated mold around the device and package substrates, the bifurcated mold including a base having a first seal and a body having a second seal, such that the second seal contacts both the first seal and the package substrate; and
encapsulating the device and package substrates employing the bifurcated mold.
2. (Currently Amended) The method of claim 1 wherein encapsulating the device and package substrates includes filling the bifurcated mold with encapsulant, wherein the ~~seal prevents first and second seals collectively prevent~~ the encapsulant from adhering to the bifurcated mold base.
3. (Currently Amended) The method of claim 1 wherein at least one of the first seal and the second seal comprises graphite.
4. (Currently Amended) The method of claim 1 wherein at least one of the first seal and the second seal comprises ~~Teflon®~~ TEFLON.
5. (Currently Amended) The method of claim 1 wherein at least one of the first seal and the second seal comprises ~~Kalrez®~~ KALREZ.
6. (Currently Amended) The method of claim 1 wherein the first seal comprises a first trench formed in the bifurcated mold base and filled with sealant and the second seal comprises a second trench forming in the bifurcated mold body and filled with sealant.
7. (Currently Amended) The method of claim 6 wherein a width of one of the first trench and the second trench ranges between about 0.5 mm and about 4 mm.

8. (Currently Amended) The method of claim 6 wherein a depth of one of the first trench and the second trench ranges between about 0.5 mm and about 4 mm.

9. (Currently Amended) The method of claim 1 wherein the first seal is recessed within the bifurcated mold base and the second seal is recessed within the bifurcated mold body.

10. (Currently Amended) The method of claim 1 wherein assembling the bifurcated mold around the device and package substrates includes positioning the package substrate in an interior recess in the bifurcated mold base configured to engage the package substrate.

11. (Currently Amended) A bifurcated microelectronic package assembly tool, comprising:
a base configured to fix an orientation of a package substrate;
a body configured to house a device substrate coupled to the package substrate; and
a first seal coupled to one of the base and a second seal coupled to the body, wherein the second seal is configured to contact the first seal and the package substrate when the device and package substrates are coupled together and oriented within the base and the body.

12. (Currently Amended) The bifurcated tool of claim 11 wherein ~~the seal is a first seal coupled to the base, the bifurcated tool further comprising a second seal coupled to the body~~ a first inner perimeter of the first seal substantially encompasses a second inner perimeter of the second seal, and wherein outer perimeters of the first and second seals are substantially similar.

13. (Currently Amended) The bifurcated tool of claim 11 wherein at least one of the first seal and the second seal comprises graphite.

14. (Currently Amended) The bifurcated tool of claim 11 wherein at least one of the first seal and the second seal comprises ~~Teflon®~~ TEFLON.

15. (Currently Amended) The bifurcated tool of claim 11 wherein at least one of the first seal and the second seal comprises ~~Kalrez®~~ KALREZ.

16. (Currently Amended) The bifurcated tool of claim 11 wherein the first seal comprises a first trench formed in the ~~one of the~~ base and ~~the body and~~ filled with sealant, and wherein the second seal comprises a second trench forming in the body and filled with sealant.

17. (Currently Amended) The bifurcated tool of claim 16 wherein a width of one of the first trench and the second trench ranges between about 0.5 mm and about 4 mm.

18. (Currently Amended) The bifurcated tool of claim 16 wherein a depth of one of the first trench and the second trench ranges between about 0.5 mm and about 4 mm.

19. (Currently Amended) The bifurcated tool of claim 11 wherein the first seal is recessed within the ~~one of the~~ base and the second seal is recessed within the body.

20. (Currently Amended) The bifurcated tool of claim 11 wherein the ~~foundation~~ base includes a recess configured to engage the package substrate.

21. (Cancelled).

22. (Cancelled).

23. (New) An apparatus, comprising:

a base including a plurality of first recesses and a plurality of first seals each extending along a perimeter of one of the first recesses, wherein each of the first recesses and the first seal therein are collectively configured to cooperate to receive and orient a corresponding one of a plurality of package substrates; and

a body including a plurality of second recesses and a plurality of second seals each extending along a perimeter of one of the second recesses, wherein each of the second seals is configured to contact:

the first seal of a corresponding one of the first recesses; and

a corresponding one of the package substrates received by the corresponding first recess and first seal.

24. (New) The apparatus of claim 23 wherein each of the first and second seals comprise a material selected from the group consisting of:

graphite;

TEFLON; and

KALREZ.